



$$\begin{array}{l}
 \text{b)} \\
 \left( \begin{array}{cccc}
 1 & -1 & 0 & 1 \\
 4 & 3 & 2 & 1 \\
 -1 & 0 & 1 & 0
 \end{array} \right)_{3 \times 4} \begin{array}{l} \downarrow \\ \downarrow \\ \downarrow \\ \downarrow \end{array} \left( \begin{array}{cc}
 1 & 0 \\
 0 & 1 \\
 -1 & 0 \\
 1 & 1
 \end{array} \right)_{4 \times 2} = \left( \begin{array}{cc}
 1+0+0+1 & 0-1+0+1 \\
 4+0-2+1 & 0+3+0+1 \\
 -1+0-1+0 & 0+0+0+0
 \end{array} \right) = \left( \begin{array}{cc}
 2 & 0 \\
 3 & 4 \\
 0 & 0
 \end{array} \right)
 \end{array}$$